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FURTHER REMARKS
ON THE
TREATMENT OF UTERINE CANCER,
SPECIALLY BY GASTRIC JUICE.
WITH AN APPENDIX.

IN the year 1867 I published in the London Obstetrical Transactions an account of two cases of epithelial cancer of the cervix uteri and its cavity treated by a new mode. This was by a strong solution of bromine, as suggested to me by my colleague, Dr. Wynn Williams.

In July, 1869, I read in the Midwifery Section at the Annual Meeting of the British Medical Association in Leeds, another paper on certain forms of uterine cancer. In this paper I recorded thirteen cases. Out of six cases of fibro-carcinoma only one recovered. In three cases of soft cancer one was cured. Two other cases of epithelioma were cured. In two cases of corroding ulcer of the womb, one case was cured. Lastly, in two cases of malignant ulceration, one recovered. Thus, out of fifteen cases of all kinds, six were cured. I have reason to believe that all these cases continue well unto this day.

In June, 1870, Dr. Wynn Williams narrated to the Obstetrical Society of London seven cases of cure by injection and application of bromine locally. These cases included two of medullary cancer, two of epithelial, one of colloid, and two of malignant disease after previous operation. These several reports prove at least that some cases of cancer are curable by the bromine treatment.

It has been objected by disbelievers that many of these cases were not genuine cancer. The only reply that can be made to such assertions is, that observers can only make statements and relate cases according to the skill and powers of diagnosis they possess, and the honest propounder of his own observed facts, is surely quite as well and better circumstanced than an objector who has never seen the cases and cannot prove or disprove their accuracy.

In all the cases narrated, however, the plan followed out was destruction of diseased tissue, and the hope of success depended upon the reproduction of healthy in lieu of the diseased tissue, while by general remedies, and a subsequent use of a diluted bromine solution, it was hoped the tendency to the deposition of malignant cells would be prevented.

The present plan consists in assisting the healing process, after the whole, or part only, of the diseased tissue has been removed, whether this is done by nature or the operator; which end gastric juice appears in many cases, not all, peculiarly fitted to insure—*i.e.*, cases which did not heal after destruction by the bromine or other means, *do* heal when subsequently treated by gastric juice; and in the course of these remarks it will be shown that even ordinary ulcers, not necessarily cancerous, and which do not heal by the usual measures employed, often also get well when dressed with gastric juice. So far I believe gastric juice will prove to be a new agent added to our armoury of medicines.

When Dr. Broadbent originally brought out his plan of treating cancer by injection of acetic acid it was thought that this acid had a solvent effect on cancerous cells, and in this manner healed the sore. But as I remarked in my paper of 1869, Dr. Barclay has shown that two other acids have this same property, *citric* to a less degree, and *carbolic* acid to a greater degree than acetic. Unfortunately a plan founded on such reasonable grounds has not been so successful as it was hoped. It may be that the particular fashion of treating cancer by these agents has passed away, or that further experience has not confirmed the good opinion first formed of their solvent effects upon cancer cells. At any rate, this method of cure seems, so far as I know, to be now abandoned.

Another agent, however, has been tried, which I hope promises better results, and this is *gastric juice*.

I do not presume to be the inventor myself of this mode of treatment. I have only further developed its employment. It has an Italian origin.

In 1869 two successful cases treated by this agent (gastric juice) were published by Drs. Tansini and Pagello in the *Gazetta Med. Lombard* (*Gazette Hebdomadaire*, No. 40).

The gastric juice was tried at the instance of Professor Lusana and procured from a dog. The first case was one of four years' growth, the cancer occupying the temporal region in a woman, aged fifty-two. The tumour was as big as a turkey's egg, bleeding freely from fungoid growths, very painful, and with characteristic cancerous odour. The treatment was begun by Dr. Tansini on Feb. 12, and in spite of an attack of erysipelas and one of *gastricism*, the patient left, cured of her tumour, on the 19th March—*i.e.*, thirty-five days after the beginning of the treatment. The enlarged glands in the neighbourhood were also absorbed.

In a second case treated upon the same plan by Dr. Pagello, a

young woman, aged nineteen, was treated for a tumour occupying the whole of the right occipital region, of the cancerous nature of which there was no doubt. It had grown slowly in seven or eight months. Nitrate of silver had no effect upon the fungous growths of it. Gastric juice was then applied, with best results. The treatment begun on March 24th, was concluded April 3rd, when the patient left cured—*i.e.*, after thirteen days' treatment.

The same plan was carried out in a third case for five days in a woman suffering from an enormous cancer of the parotid, extending to the clavicle. One-fourth of the tumour was destroyed, but the patient's cachectic condition was such that she died at the end of this period.

I believe I have read of some case of cancer having been treated successfully by gastric juice some twenty-five years back by some French physician, but I have been unable to find the reference.

I must confess that I read these cases of Drs. Pagello and Tansini with singular interest. They appeared to me to point to the probability of curing physiologically even such a fearful disease as cancer. This will be more obvious by considering the following aphorisms.

1st. Certain remedies, like certain inflammations, act upon certain tissues in preference to others. As I have before observed, iodine acts specially on glandular enlargements, arsenic on the skin, colchicum on chalky concretions. Some caustics destroy some living portions while they scarcely influence others. The rheumatic poison will affect the fibrous tissues; the poison of typhoid the mucous membrane of the intestines; that of exanthemata the skin, &c. &c.

2nd. Dr. Beale has shown that the virus of a contagious disease differs remarkably in its vital properties and powers from healthy tissue—new growths, for instance, callus between broken bones, dissolve first. The fat deposited through using cod-liver oil, or by other artificial means, in many a consumptive patient, disappears far more rapidly on a second relapse than that originally belonging to the patient.

3rd. Once the circumstances which tend to the production of a local growth are removed a growth will disappear very rapidly. For instance, a chalk stone, or a disintegrating fibroid, the work of months, perhaps of years, will disappear in a few days.

4th and lastly. Solution of a morbid growth, a cancer cell, for instance, being once effected, the attraction to the production of similar growths from the neighbourhood is removed, and the growths disappear.

Now it is manifest if these data be granted as aphorisms, then gastric juice is, *primâ facie*, eminently qualified to fulfil the indications required, and I have observed all this in practice.

It may be useful to premise, however, by enumerating the difficulties which met me at the threshold of my experiments.

How was I to procure the gastric juice? My first trial was made with a specimen procured for me from the stomach of a pig by Mr. Greenish, of New Street, Dorset Square. The mucous membrane of a pig's stomach was digested in a dilute solution of hydrochloric acid (gr. xij to ℥j water), and exposed to a gentle heat, 70° Fahr. This preparation, constituting the artificial gastric juice, was used in my first experiments. Unfortunately, however, it did not keep, and it was not easy to procure it at all times. One accident I had with it, although I took the precaution to filter it through animal charcoal previously: pyemic poisoning following its injection in a small breast tumour. Fortunately, however, the woman ultimately recovered. Of its good effects however in healing ulcers, when applied topically on lint, I had sufficient evidence to encourage me to continue my experiments.

I had now recourse to Mr. Morson, the distinguished chemist of that name, and to whom I was referred as being the chemist above all others who had given most attention to the preparation of pepsine. From him I received two bottles—the ordinary pepsina porci and the medicinal pepsine. That gentleman indeed entered most heartily into my views, and with both these preparations I continued for some time my experiments.

To a small teaspoonful of the powder, which consists, as most of you are aware, of pepsine and starch, was added two of water. When I used the pure pepsina porci, I added a few drops of dilute muriatic acid. In this was soaked a piece of lint, which was applied to the saturated surface, or immediately following the application of bromine and the formation of the slough by it. The solvent effect of this agent was really remarkable, and the rapidity with which it dissolved the slough formed. Under ordinary circumstances, the slough produced by bromine takes seven or eight days to be thrown off. In three or four days it was dissolved by this agent, and a healthy granular surface exposed. It was at this time that a paper was published in one of the journals, alleging that many of the preparations of pepsine, sold as such, really contained very little of that agent at all. In this paper an analysis of several specimens by different makers having been made, and preference given to Mr. Bullock's; I tried this preparation also, but I did not find it superior to Morson's, and I must say it was more rapidly decomposed. In the course of these experiments I found:—

1st. Gastric juice had a marked effect in dissolving sloughs which were formed naturally, or were induced by artificial agents on these growths.

2nd. It had a marked solvent effect up to a certain point upon the growths themselves. For instance, applied within the uterus, in cases where the interior of the cervix as well as the lips of the cervix were affected with cancer, the cavity would gradually become more patent, until I suppose the less vital cancerous growths had been dissolved, and would contract subsequently. I noticed this particularly

in the case of an Irishwoman affected with cancer of the uterus, who on first admission bled so profusely that it seemed positively dangerous to make an examination. After destroying the growth with bromine, I began to apply Morson's gastric juice. The cavity became larger for several days. All smell had ceased and bleeding, but the cavity subsequently contracted until the wound made was all but healed, and she left the hospital.

3rd. The rapidity with which fungoid and bleeding granulations disappeared and assumed a healthy character in some of these cases was remarkable. First flattened, and then hollowed out, with gradual disappearance of that unhealthy slate-coloured slough, which is so often and repeatedly seen forming on cancerous sores, and the continual reappearance of which is so disheartening to a practitioner, when applying the usual reagents. This was well exemplified by Dr. Pagello, in the second case, before referred to, in a comparative experiment made by gastric juice on the one hand, and perchloride of iron on the other, on different parts of the same wound. "On removing the dressing, it was found that the whole part of the wound which had been dressed with gastric juice was depressed, and its fungosities diminished in size, whilst in the part treated by perchloride of iron, the fungosities were much elevated and sanguinolent."—(*Gazette Hebd.* No. 40). This result proves, and I have often myself observed the same effect, that topically gastric juice exerts a specific influence upon cancerous sores.

4th and lastly. If solution of a cancerous cell be necessary as a link in the removal of cancer, and to check the tendency of the attraction towards such a sore, or rather formation of additional malignant cells near it, it is clear at once that gastric juice must have a very beneficial influence upon cancer. Indeed, no agent in nature has such solvent powers as gastric juice. Moreover its effect in checking fœtor and correcting putridity, as in the digestion of high game, is well known. We can indeed at once understand how by means of this agent a cancer tumour, however indurated it may be, should be as it were digested away layer by layer, until it is entirely removed. In fact, the solvent powers of citric, acetic, and carbolic acid, as compared to it are almost *nil*.

But gastric juice may do more. Having dissolved or destroyed the cancerous sore, it may utilize it for the healthy nutrition of the very person upon whom it has grown.

And here let me call your attention to some of the known effects of gastric juice on animal matters generally. Not only does this agent dissolve, but it acts differently on different kinds of food. Proteine bodies or gelatiniferous food is converted into different substances, which although they coincide in chemical composition and many of their physical properties with the substances from which they are derived, differ from them—1st, in ready solubility in water and dilute alcohol; 2nd, in not being able to form insoluble compounds with most metallic salts. Hence they are called *peptones*.

Peptones are white amorphous bodies, devoid of odour, soluble in water, combining readily with bases, alkalies and alkaline earths, forming neutral salts. Lehmann has shown that most proteine bodies become converted in what he calls *albuminose* in lieu of peptone—*i.e.*, such as globuline, vitelline, legumine, chondrine, and gelatinous tissues. Fibrine is converted into a non-coagulable soluble substance, fibrine-peptone. Caseine is first precipitated and then redissolved.

Looking now to the composition of cancer, with 20 to 30 per cent. albumen, 15 to 28 per cent. fibrine, and 7 to 8 per cent. gelatine, its convertibility into a soluble peptone, in which all the original cancer cells have been dissolved away, so as to be utilized as healthy tissue in the body, is at once obvious.

These considerations granted, it is almost wonderful that this agent was not used before. I imagine the difficulty has been to procure it in sufficient quantity. Mr. Morson's is an excellent preparation, but still it would be desirable to obtain it as a liquid, without all the disadvantage of its admixture with starch. To procure it with any regularity from dogs would necessitate continual executions of these animals, which in itself is a great objection. It is manifest, therefore, that its procuration from one of those animals which are constantly used as food is a necessity, and once regularly put in operation far preferable to its preparation from the dog. But yet in this department comparative experiments on the efficiency of the gastric juice of different animals are wanting. It is presumable that the gastric juice of birds of prey, or carrion birds, might not only be stronger, but more antiseptic; a use to which these animals (crows, for instance, who are a very pest in some parts of the world) might be appropriated. Upon this point, however, I can only speak theoretically; and I must leave it to others to elucidate the truth of this suggestion.

Some time back, feeling the difficulty of obtaining a regular supply of this agent in the liquid form, and having become acquainted with the beautiful pepsine preparations of Messrs. Young and Postans, I applied to the latter gentleman, stating my difficulties, and soliciting his assistance towards procuring a preparation of pepsine fitted for my purpose. He first supplied me with an Irish preparation, with which I was before unacquainted, called "Prepared gastric juice—a digestive solution of pepsine," introduced by Messrs. Hamilton, Long, and Co., of Sackville Street, Dublin. This is another of those preparations in which that remarkably solvent agent *glycerine* has been utilized. Mr. Postans informed me that when the mucous membrane of the stomach of a pig was cut up and placed in glycerine, the latter took up all the pepsine contained in it, and that a very concentrated solution of pepsine could thereby be obtained. A certain amount of dilution was however necessary, because if the solution were too concentrated it underwent decomposition. Having this preparation before me, I proceeded to experiment with it, and it was with this agent I healed the ulcer in the case of Mrs. G. (Case 2).

Of the strength of this preparation—which is made by first washing the fresh stomach of a pig, then cutting it into slips, and digesting for a week in as much glycerine as will entirely cover it, then straining and filtering—I had no idea at first. I learn, however, from Mr. Long's experiments, as communicated to me by Mr. Postans, that a solution of liq. pepsinæ and acidi hydrochl. ℥xv in ℥j of water dissolved 700 grains of fresh moist fibrine at 100° Fahr.; 1 drachm of liq. pepsinæ with glycerine, converted into a very soft pulp ℥jss of lean beef; the same quantity of the liq., &c., dissolved 1½ ounces also of lean mutton. Lastly, a mixture of liq. pepsinæ ℥ss, chloride of sodium ℥ss, and ℥iv of water entirely dissolved 30 drachms of white of egg.

Reflecting subsequently on the admixture of glycerine in this preparation of liquid pepsine, I began to consider its probable chemical action. Dr. Marion Sims, of New York, as you are mostly aware, has proved two things in regard to one of these agents, glycerine, in connexion with uterine disease:—1st. That while a piece of cotton placed in the vagina of a woman becomes very offensive, even if only retained a few hours in it; yet if previously saturated with glycerine, then, although removed even three days subsequently, it comes out quite sweet. Glycerine is thus powerfully *antiseptic*. 2nd. When placed within the vagina this glycerinized cotton exerts a powerful *exosmotic* action. A copious watery discharge will follow, and continue so long as the cotton retains any glycerine. The beneficial effect thus of glycerine in promoting gradually the absorption of an enlarged uterus comes to be explained.

Now in view of these two properties of glycerine it occurred to me that in the solution of pepsine in glycerine the antiseptic properties of the latter agent would be beneficial. But the second effect—*i.e.*, the exosmotic action, might be sometimes useful and sometimes the reverse: useful because the layers of cancer as dissolved would be as it were carried outwardly by the exosmosis, but injurious as preventing the *endosmosis* or absorption of the gastric juice and the necessary solution of the cells higher up, or in the neighbouring glands. I called Mr. Postans's attention to these facts, and the result was the preparation I now show you, which he calls "concentrated solution of pepsine," which consists of pepsina porci ℥iv, acidi muriat. dil. ℥48, aquæ ad ℥iv—*i.e.*, 3 of pepsine to the ounce. Of the solvent effects of this last solution I can speak in high terms. I at first used it mixed with equal parts of water; now I apply it undiluted to a wound. The cotton or lint moistened with it does not keep as fresh as when saturated with glycerine solution within the vagina. Its solving effects, however, are equally marked, and it bids fair in the preparation of beef and mutton essences to play hereafter a very prominent part. With these two preparations (which, I am informed, can be now procured in any quantity), the desideratum of pepsine solutions for all practical purposes is entirely fulfilled.

In conclusion, it remains for me only to speak of the mode of its employment, as I do not mean it in any way to supersede other means of treatment. I recommend it only as a powerful adjuvant.

First, the cancerous growth about to be treated should have its surface destroyed, if it be not already in process of ulceration ; but, even in these latter cases, it is well to remove a considerable portion. It matters not by what agent this is done—by Recamier's canula, a scoop, the *écraseur*, strong caustics, the actual cautery. I have used all, according to the case. Once, however, I have a raw surface, or even if it be still covered by a slough, which is the result of the caustics or cautery, I apply the gastric juice on a piece of lint in excess. This I do through a speculum. Next I cover this with a piece of oil-silk or gutta-percha sheeting, keeping all in its place by a plug of cotton. This should be done twice a day, oftener if practicable. It will be seen in many cases that the sloughs disappear, and a red healthy granular surface appears, which heals rapidly. In cases where we have adhesions I hope that the remedy may still be absorbed ; still these instances are less promising. In cases, however, in which the whole system is poisoned, and the cachexia very marked, we must not be surprised if we fail of success. This proviso would apply equally to many diseases, syphilis especially, but the marked occasional failure in no way sets aside the truth of the proposition that in many cases mercury and iodine do cure marked and constitutional syphilis. So let it be clearly understood I am far from saying that gastric juice will cure *all* cases of cancer. But I am sure it will cure some where other agents have failed. In such a dreadful disease we should feel grateful for any remedy which may increase our hopes of success.

I have annexed two cases only by way of illustration, and as an inducement to others to experiment and report their results.

Jane B., aged thirty-four, married, engaged in domestic occupations, admitted under my care April 12th, 1870. Has been ill for seven years. Her illness began by floodings, and an inflammatory attack which followed. Kept her bed three months, flooding off and on. Was under Mr. Rogers for twelve months in the hospital out-department, but improving, became an inmate under him. Flooding now ceased for five months. She then was transferred to my care. Never regular, no pain, except occasionally a little back-ache. Examination :—Uterus large, anterior and right lateral os projecting, hard, resistant, very irregular ; vagina hot. The left lateral lip is sunken, with a small hard nodule on it. But the right lateral projection projects about one inch, and inclines to bleed on touch. Sound penetrates normal distance, or perhaps a quarter of an inch more than is normal. The left lateral part of the uterus ulcerated.

Preliminary Treatment.—On the 13th the red-hot iron was applied to the os. It seemed to make but little impression on the hard growth, and was unattended with pain. It was kept on for one minute, guarded by a wooden speculum, followed by an injection of cold

water, and subsequently dressed with cotton dipped in sweet oil. By the 20th.—There had been a good deal of muco-purulent discharge, followed by charred pieces of flesh. To-day slough quite off. The hard enlargement still projects. Red-hot iron repeated. There was more pain on the 21st, requiring the use of $\frac{1}{2}$ grain of morphine. 29th.—The larger protuberance has disappeared, and in lieu thereof a small one remains, about the size of a bean. Red-hot iron again applied to this part.

May 7th.—Parts are now quite level. No pain. Sloughs came away. Healing over in part. Quite at the left side, however, a small nodule can be felt, imbedded in the substance of uterus of the size of a pea. This was cut open freely by a pair of scissors, and solution of bromine (1 in 5) applied to it.

May 11th.—Parts healing well. Touched with glycerine and tannin solution.

On 12th catamenia came on, lasting four days and then disappeared. It was somewhat offensive. On examination on the 18th, the uterine cervix was found level but ulcerated, bleeding on touch. Collodion styptic was applied. Unfortunately at this stage of the treatment the patient was obliged to leave the hospital to attend to her sick children.

On June 29th, 1870, however, she was readmitted. Since she left the hospital she had been seen from time to time. The wound first granulated under the influence of Llandolfi's solution, applied by a piece of cotton superficially, and dried at once. Subsequently, however, the ulceration broke out again, and as she was removing to Ireland, she was readmitted to be more carefully observed. The case had been seen by Dr. Day in the interim, who pronounced it to be carcinoma. On examination uterus was found largish. The inferior os natural and much more regular. The superior os bulging, irritable, bleeding on slightest touch, and hard. There was also much more uterine pain, bearing-down, and backache than before. Catamenia when on was very offensive, while in the interval there was a white sanious discharge of green waters.

30th.—The strong solution of Llandolfi (1 in 5) was again applied in the gutta-percha cup, over a piece of cotton, guarded externally by carbonate of soda cotton plugs. It produced intense pain in about ten minutes. The sensation was one of burning, but chiefly as if it was "drawing out the uterus." It became, however, so great that she could not bear its application longer than two hours, when the matron removed it. Only that portion enclosed in the gutta-percha cup was found destroyed. Soda washings applied. Deep slough formed.

This case, it will be seen, had so far benefited, but was not cured by either the bromine or red-hot iron treatment combined. It was therefore thought time to begin the—

Pepsine Treatment.—On July 1st she was reported better, and the sloughs coming away, but the odour was still offensive, and the

wound bleeding on touch ; Mr. Morson's medicated pepsina porci was therefore applied. This was repeated daily till August 2nd. A catamenial period occurred in this interval, less copious than before, and the wound had well nigh healed ere it came on. So soon as this ceased the wound healed rapidly in two days. The parts were healthy in appearance and touch. All ulceration healed. Discharged cured. This patient is still alive, and, so far as I know, free from cancerous disease.

Case 2.—Margaret H., aged fifty-nine, living near Barnes, a cook by profession, admitted under my care August 6th, 1860. This patient had been seen by two of my colleagues in the out-department of the hospital, and the disease diagnosed as cancer. She complained of a copious, rusty, somewhat offensive discharge, which had persisted for a year. She had been an out-patient under my care, and I had destroyed the ulcerated surface with Llandolfi's liquid. It healed after a time, but to my annoyance broke out again. The upper part of the vagina was also here involved, and I had been compelled to dilate it with sponge tents : all this to very little purpose, except to reduce the discharge.

On her admission she was carefully examined. On passing the finger it abutted against a hard cartilaginous ring, and beyond this the uterus was felt and the os. The ring was about half an inch long, admitting the finger, irregular ; discharge therefrom sanious and bloody, not exactly offensive, but quite of the character of carcinoma.

Preliminary Treatment.—The first thing done in this case was to dilate the vagina by tents, which occupied two or three days to accomplish. It was then freely covered with Llandolfi's solution, which gave great pain, producing a deep slough, the adjoining parts being guarded by carbonate of soda.

The pepsine treatment was now had recourse to. It was then dressed in the usual way with Morson's medical pepsine every day. Great fetor followed the removal of the slough, which was not entirely removed, but nearly so, when the hospital closed. The wound was dressed three times at my own house, with Young and Postans's pepsine solution. There was scarcely any discharge, and the healing process was going on well. On August 27th I gave her arseniate of iron, gr. 1-12, in pills, three times a day, with a weak bromine injection, 1 drop to $\frac{3}{4}$ j of water. I saw her some months afterwards. Parts were completely healed.

Here was another case in which the bromine and red-hot iron treatment had failed in a measure, and involving also the vagina, in which a cure followed the use of the gastric juice. Others might be related. These will, however, suffice as a sample. On some future occasion I may give you the results of my further experience.

APPENDIX.

When this paper was first read, an objection was made against it, to the effect that if gastric juice could cure cancer, how was it that cancer occurred in the stomach? The answers were given at the time, but not reported.

1st. Cancer, when it occurs in the stomach, first affects as a rule the *submucous* cellular tissue. The mucous membrane is the *last* to suffer, and when it does, death usually occurs so rapidly that there is no room for the action of the gastric juice, hemorrhage generally occurring on perforation. When this ulceration has not taken place, especially at the pyloric orifice, death takes place from gradual closure of the orifice. In such cases the mucous membrane is interposed between the secreted juice and the cancerous mass. It is essential in order that the gastric juice should do its duty as a solvent of the cancerous cells and as an absorbent, that it should be applied locally to a *sore*, and not to a surface protected by a mucous membrane. Now as one of the functions of the gastric mucous membrane during life is especially to resist the action of gastric juice, it would not be surprising if in cases of cancer of the stomach, its own secretion failed to act. 2nd. There is, however, one fact which should not be lost sight of in estimating the probable contingencies of a cure taking place through the agency of gastric juice even in these very examples of cancer of the stomach. We have all seen instances which were diagnosed by some of the ablest of medical men, as cases of cancer of the stomach, and where evidence of progression to ulceration was clear, and yet these cases have got well. Only a few days back an experienced practitioner informed me of some twenty cases diagnosed by some of the first surgeons and physicians in London in consultation with himself as cancer of the stomach, and which had nevertheless got well. One of two conclusions here must be drawn. Either that in cancer of the stomach it is not possible to make a correct diagnosis, or that some cases of cancer of stomach do get well. Without, therefore, in any way insisting upon this latter conclusion, which after all is not necessary for my argument, it must be admitted as a possible contingency, and as favouring the equally possible curative agency of the gastric juice even in cases of cancer of the stomach. But lastly, and this after all is the strongest point, and admits of no evasion, we all know how essential *rest* is to insure a cure of a wound or ulcer. How often, for instance, will simple rest heal an ulcer of the leg, when all other means have failed. But in the stomach, the organ of digestion, rest is impracticable, and active motion in it very frequent and continuous. If, therefore, an ulcer in the stomach ever gets well, it is a great triumph. Where however we have a cancerous ulcer of the uterus, we can *insist* upon rest, and thus a topical application has the most favourable chance of success. Since writing this paper, I may add, I have met many cases of persisting ulcers of the uterus, some so

jagged, hard, and irregular, and bleeding so freely on touch, that I feel assured many practitioners would have, and some had, characterized them as cancerous. Several of these have got well on using gastric juice when every other agent tried had failed. Of its efficacy, therefore, in many *dubious* cases I am assured. The same is true for many obstinate ulcerations which were not cancerous. I am therefore satisfied, and this I state emphatically, that though I am far from urging that it will bring about a healing process in *all* cases of cancer, it will in some, and as a topical agent in other ulcerations it is invaluable.
